

# 8-Methylene-cis-3-thiabicyclo[4.4.0]decane

**Inchi:** InChI=1S/C10H16S/c1-8-2-3-10-7-11-5-4-9(10)6-8/h9-10H,1-7H2/t9-,10-/m0/s1  
**InchiKey:** WQEZQTRTRLMBTM-UWVGGRQHSA-N  
**Formula:** C10H16S  
**SMILES:** C=C1CCC2CSCCC2C1  
**Mol. weight [g/mol]:** 168.30  
**CAS:** 77471-74-0

## Physical Properties

Property code	Value	Unit	Source
gf	199.36	kJ/mol	Joback Method
hf	0.73	kJ/mol	Joback Method
hfus	12.02	kJ/mol	Joback Method
hvap	44.34	kJ/mol	Joback Method
ie	8.22	eV	NIST Webbook
log10ws	-3.05		Crippen Method
logp	3.096		Crippen Method
mcvol	142.090	ml/mol	McGowan Method
pc	3069.34	kPa	Joback Method
tb	505.75	K	Joback Method
tc	744.34	K	Joback Method
tf	321.39	K	Joback Method
vc	0.507	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	322.56	J/molxK	505.75	Joback Method
cpg	343.04	J/molxK	545.51	Joback Method
cpg	362.16	J/molxK	585.28	Joback Method
cpg	379.98	J/molxK	625.04	Joback Method
cpg	396.58	J/molxK	664.81	Joback Method
cpg	412.01	J/molxK	704.57	Joback Method
cpg	426.33	J/molxK	744.34	Joback Method

# Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C77471740&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C77471740&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>

# Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>ie:</b>	Ionization energy
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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